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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/213,984	12/17/1998	WILHELMUS J.M. DIEPSTRATEN	DIEPSTRATEN-	6137

27964 7590 10/31/2003

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EXAMINER	
DONAGHUE, LARRY D	
ART UNIT	**PAPER NUMBER**
2154	13

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PRL

Office Action Summary	Application N .	Applicant(s)	
	09/213,984	DIEPSTRATEN ET AL.	
	Examiner	Art Unit	
	Zarni Maung	2154	

-- The MAILING DATE of this communicati n appears on the cover sheet with the c rrespondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. This action is responsive to the amendment filed on August 11, 2003. Claims 1-22 are presented for further examination.

2. The rejection is maintained and set forth below.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 8-11 are rejected under 35 U.S.C. 10.Z(b) as being anticipated by Vaitzblit et al. (5,528,513).

5. Vaitzblit et al. taught the invention (claims 1, 4 and 8, 11) as claimed including an event recorder and event acknowledger that acknowledges events based on code of currently active context (col. 4, lines 48-60; code indicating the period); foreground controller (figure 1, 158) for activating the task according to priority (see abstract) and

in response to events (see abstract, particularly lines 8-9, invoked by timer interrupt for each task is an event), and a background controller operating in a cyclical manner (col. 5, lines 15-17 and Figure 1, 100).

6. As to claims 2 and 9, Vaitzblit et al. taught masking (col. 4, lines 43-60).

7. As to claims 3 and 10, Vaitzblit et al. taught storing the events therefore the reference taught at least a Flip-Flop (col. 3, line 55- col. 4, line 67).

8. Claims 5, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) as applied to claims 1, 8, and above, and further in view of Dummermuth et al. (6,009,454).

It would have been obvious to one of ordinary to replace the time slice scheduling of Vaitzblit et al. with the instruction count as expressly suggested by Dummermuth et al. (Col. 3, lines 22-23). The combination of reference does not show that each of the background task accomplishes an equal amount of work before a cycle of background processing repeats. However, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Vaitzblit et al. to make each of the background task accomplishes an equal amount of work before a cycle of background processing repeats, because Vaitzblit et al. suggest the process of keeping processing under a guarantee time frame (see column 6).

9. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) as applied to claims 1 and 8 above, and further in view of Seibert et al. (5,239,652).

Vaitzblit et al. failed to disclose placing the processor in an idle state. Seibert et al. taught place a processor in idle state in response to inactivity. It would have been obvious to combine the teachings to allow for the reduction of power consumption.

10. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. as applied to a claims 1 and 8 above, and further in view of McLain et al. (6,256,659).

As to claims 7 and 14 , It would have been obvious to one of ordinary to include the teaching of vectoring as suggested by McLain, Jr. et al. (Col. 12, lines 63-67), to gain the benefit of allowing the process to resume at a later time where it was interrupted.

11. Claims 15-18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. as applied to claims 1- 4 and 8-11 above, and further in view of Motomura (5,713,038).

Vaitzblit et al. taught the substantially invention (claims 15 and 18) as claimed including an event recorder and event acknowledger (col. 4, lines 48-60); a foreground controller (figure 1,158) for activating the task according to priority (see abstract) and

in response to events (see abstract, particularly lines 8-9, invoked by timer interrupt for each task is an event), and a background controller operating in a cyclical manner (col. 5, lines 15-17 and Figure 1, 100).

Vaitzblit et al. did not teach a plurality of register sets and the interconnection of the plurality of register sets with the execution core. Motomura taught the use of a plurality of register sets and the interconnection of the plurality of register sets with the execution core. It would have been obvious to one of ordinary skill in the data. processing art to modify the teaching of Vaitzblit et al. with that of Motomura to realize high speed and more flexible context switching, in an conventional processor.

12. As to claim 22, It would have obvious to one of ordinary skill in the data processing art to included the teaching of Vaitzblit et al. and Motomura, to gain the benefit of the hierarchical scheduling technique and to realize high speed and more flexible context switching, in an general purpose computer.

13. As to claims 16, Vaitzblit et al.. taught masking (col. 4, lines 43-60).

14. As to claim 17, Vaitzblit et al. taught storing the events therefore the reference taught at least a Flip-Flop (col. 3, line 55- col. 4, line 67).

15. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Vaitzblit et al. (5,528,513) in view of Motomura (5, 713,038) as applied to claim 15 above, and further in view of Dummermllth et al. (6,009,454).

It would have been obvious to one of ordinary to replace the time slice scheduling of Vaitzblit et al. with the instruction count as expressly suggested by Dummermuth et al. (Col. 3, lines 22-23).

16. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vaitzblit et al. (5,528,513) , Dummermuth et al. (6,009,4`4) and Motomura (5,713,038) as applied to claim 15 above, and further in view of Seibert et al. (5,239,652).

The combined teachings failed to disclose placing the processor in an idle state. Seibert et al. taught place a processor in idle state in response to inactivity. It would have been obvious to combine the teachings to allow for the reduction of power consumption.

17. Claim 21 is rejected under 35 U.S.C. 103(a) as being; unpatentable over Vaitzblit et al. and Motomura as applied to a claim 15 above, and further in view of McLain et al. (6,256,659).

As to claim 21, It would have been obvious to one of ordinary to include the teaching of vectoring as suggested by McLain, Jr. et al. (Col. 12, lines 63-67), to gain the benefit of allowing the process to resume at a later time where it was interrupted.

18. Applicant's arguments filed 8/11/03, have been fully considered but they are not persuasive.

19. Applicant argues that Vaitzblit et al. failed to teach acknowledging ones of said events which are relevant to the currently-active task. Applicant noes that "relevant" means having a significant and demonstrable bearing on a matter at hand.

20. Examiner disagrees as the task is scheduled on the basis of priority, the relative criticality of the task. The decision to allow a task to proceed or to be inhibited has a significant and demonstrable bearing on the completion of that task. The applicant argues that Vaitzblit et al. failed to teach event acknowledger that acknowledges events based on code of currently active context. Vaitzblit et al. disclose the event acknowledger that acknowledges events based on code of currently active context (col. 4, lines 48-60; code indicating the period).

21. The remaining arguments are based on the same element being missing.

22. See paragraph 20, for response.

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry Donaghue whose telephone number is (703) 305-9675. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (703) 305-9678. The fax phone number for this Group is (703) 308-9052. Additionally, the fax numbers for Group 2100 are as follows:

Official Faxes:	(703) 872-9306
After Final Responses:	(703) 746-7238
Draft Responses:	(703) 746-7240

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 305-3900.

October 28, 2003

ZARNI MAUNG
PRIMARY EXAMINER